

AU/ACSC/129/1999-04

AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

EXAMINATION OF DEMOGRAPHIC DIFFERENCES  
BETWEEN THE UNITED STATES POPULATION AND THE  
UNITED STATES AIR FORCE

by

Stephen P. Melroy, Major, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Lieutenant Colonel Jeffrey Hukill, USAF

Maxwell Air Force Base, Alabama

April 1999

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.				
1. REPORT DATE (DD-MM-YYYY) 01-04-1999		2. REPORT TYPE Thesis		3. DATES COVERED (FROM - TO) xx-xx-1999 to xx-xx-1999
4. TITLE AND SUBTITLE Examination of Demographic Differences Between the United States Population and the United States Air Force Unclassified			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Melroy, Stephen P. ;			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME AND ADDRESS Air Command and Staff College Maxwell AFB, AL36112			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME AND ADDRESS ,			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT APUBLIC RELEASE ,				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT The relationship between the US public and its military has sometimes been characterized as a ?love-hate relationship.? The reasons for this association are as many as they are varied, but it seems safe to assume that this cyclical relationship will continue. An underlying portion of this relationship is the support the public gives to its military in peacetime and wartime. Several contextual issues, such as integrity issues involving military personnel, casualty rates and many others can effect this support. To the end of exploring the effects of contextual issues on public support, this paper seeks to ascertain the effects of a particular contextual issue, demographics. Demographic differences between the US population of 18 to 54 years of age and the active duty United States Air Force are explored to see if there are substantial divisions in the realm of gender and race/ethnic background. Finally, analysis is accomplished on these differences and conclusions drawn to ascertain any consequences on public support of the military.				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19. NAME OF RESPONSIBLE PERSON
		Public Release	63	Fenster, Lynn lfenster@dtic.mil
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified		19b. TELEPHONE NUMBER International Area Code Area Code Telephone Number 703767-9007 DSN 427-9007
				Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39.18

## **Disclaimer**

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

## *Contents*

	<i>Page</i>
DISCLAIMER .....	ii
LIST OF ILLUSTRATIONS .....	v
LIST OF TABLES .....	vii
PREFACE .....	viii
ABSTRACT .....	ix
INTRODUCTION.....	10
Overview.....	10
Limitations .....	12
PUBLIC SUPPORT OF THE MILITARY.....	14
Foundations of Public Support.....	14
Contextual Issues Effecting US Public Support of the Military .....	16
METHODOLOGY .....	20
Overview.....	20
Data Collection .....	20
Data Sources .....	20
Categories .....	21
Data Stratification .....	22
Caveats to Data Collection.....	23
DATA PRESENTATION AND ANALYSIS.....	25
Introduction.....	25
Population Comparisons .....	26
Gender Comparison .....	28
Race/Ethnic Comparison .....	31
Hispanic Population.....	31
White Population .....	32
Black Population.....	33
Alaskan/Native American Indian Population .....	34
Asian/Pacific Island Population.....	36
Race/Ethnic by Gender Comparison.....	38
Hispanic Males and Females .....	38

White Males and Females .....	40
Black Males and Females .....	41
Alaskan/Native American Indian Male and Females .....	43
Asian/Pacific Island Males and Females .....	44
Summary .....	46
CONCLUSIONS .....	48
Introduction.....	48
The Gap between Military and Society.....	48
Demographic Shifts .....	48
Future Considerations .....	54
Budgetary Impacts .....	54
Personnel Recruitment.....	55
Public Support of the Military .....	56
Recommendations for Future Research.....	57
Summary .....	57
Demographic Data .....	59
GLOSSARY .....	61
BIBLIOGRAPHY .....	62

## *Illustrations*

	<i>Page</i>
Figure 1 US population Ages 18-54.....	27
Figure 2 USAF Active Duty Force Strength.....	27
Figure 3 USAF Strength, as a Percentage of US Population .....	28
Figure 4 USAF and US Male Population.....	29
Figure 5 USAF and US Female Population .....	29
Figure 6 Difference Trend Between USAF and US Male Populations.....	30
Figure 7 Difference Trend Between USAF and US Female Populations .....	30
Figure 8 USAF and US Hispanic Population.....	31
Figure 9 Difference Trend between USAF and US Hispanic Populations .....	32
Figure 10 USAF and US White Population .....	32
Figure 11 Difference Trend between USAF and US White Populations.....	33
Figure 12 USAF and US Black Population.....	34
Figure 13 Difference Trend between USAF and US Black Populations .....	34
Figure 14 USAF and US Alaskan/Native American Indian Population .....	35
Figure 15 Difference Trend between USAF and US Alaskan/Native American Indian Populations.....	35
Figure 16 USAF and US Asian/Pacific Island Population.....	36
Figure 17 Difference Trend Between USAF and US Asian/Pacific Island Populations .....	36
Figure 18 Difference Trend between USAF and US Hispanic Males .....	39
Figure 19 Difference Trend between USAF and US Hispanic Females.....	39

Figure 20 Difference Trend between USAF and US White Males.....	40
Figure 21 Difference Trend between USAF and US White Females .....	41
Figure 22 Difference Trend between USAF and US Black Males .....	42
Figure 23 Difference Trend between USAF and US Black Females.....	42
Figure 24 Difference Trend between USAF and US Alaskan/Native American Indian Males .....	43
Figure 25 Difference Trend between USAF and US Alaskan/Native American Indian Females .....	44
Figure 26 Difference Trend between USAF and US Asians/Pacific Islander Males.....	45
Figure 27 Difference Trend between USAF and US Asians/Pacific Islander Females.....	45
Figure 28 Female Representation in the USAF .....	50

## *Tables*

	<i>Page</i>
Table 1 Summary of Race/Ethnic Background Differences .....	37
Table 2 Summary of Race/Ethnic Background by Gender Differences .....	46
Table 3 Summary of Demographic Analysis .....	47



## *Preface*

The topic I address in the paper has always been one of interest to me. As the Air Force and the military as a whole became an all-volunteer force and increasingly downsized, I found that in some ways we began to separate ourselves from the civilian population as a whole. These feelings were anecdotal, based on my experiences with family, friends, and other general interaction with civilians. As I started in Air Command and Staff College, I read some articles that expressed similar views, and my interest peaked resulting in my decision to investigate it more thoroughly.

I wish to first thank my faculty advisor, Lt. Col. Jeffrey Hukill, USAF for his sage advice and his infectious enthusiasm regarding the topic. His assistance in all facets of this paper made it a very worthwhile effort in the pursuit of my graduation. I would also like to thank the assistance of the Air Force Personnel Center for their pursuit of the data I needed. In addition, the United States Bureau of the Census provided valuable aid in procuring US population data.

In conclusion, this work is dedicated to the memory of Colonel F. “Badger” Johnson, who passed away recently. Colonel Johnson was a mentor and an outstanding Air Force officer who taught me and several other junior supply officers the meaning of “Pride in Support.”

### *Abstract*

The relationship between the US public and its military has sometimes been characterized as a “love-hate relationship.” The reasons for this association are as many as they are varied, but it seems safe to assume that this cyclical relationship will continue. An underlying portion of this relationship is the support the public gives to its military in peacetime and wartime. Several contextual issues, such as integrity issues involving military personnel, casualty rates and many others can effect this support. To the end of exploring the effects of contextual issues on public support, this paper seeks to ascertain the effects of a particular contextual issue, demographics. Demographic differences between the US population of 18 to 54 years of age and the active duty United States Air Force are explored to see if there are substantial divisions in the realm of gender and race/ethnic background. Finally, analysis is accomplished on these differences and conclusions drawn to ascertain any consequences on public support of the military.

## **Chapter 1**

### **Introduction**

*To climb steep hills requires slow pace at first*

—William Shakespeare

#### **Overview**

The relationship between the US public and its military has sometimes been characterized as a “love-hate relationship.” The reasons for this association are as many as they are varied, but it seems safe to assume that this cyclical relationship will continue. An underlying portion of this relationship is the support the public gives to its military in peacetime and wartime. Several contextual issues, such as integrity issues involving military personnel, wartime casualty rates and many others can effect this support. To the end of exploring the effects of contextual issues on public support, this paper will seek to ascertain the effects of a particular contextual issue, that of demographics. Demographics were chosen as an instrument of measure because it was readily available in formats suitable to be analyzed and fit the scope of this research effort. In addition, demographics can be a very important tool in the study of society, its characteristics, and possible reasons for change and conflict within society. They can show stark contrasts in age, gender, race, and ethnic background, which have sown the roots of problems in past years. They can also isolate and spot trends in fast growing elements of a population to

learn how to plan the society of the future as it relates to needs. An important example of this is the growing number of senior citizens in the United States. Recognition of this trend is important so as to plan for an increased demand in health care professionals as well as budgeting for increased Social Security expenditures.

The United States Air Force (USAF) has depended on an all-volunteer force since 1974. Prior to this, it relied on a combination of volunteers and conscripts to make up its strength. Since conscription in principle favors no part of society, the resultant military force should be demographically representative of society as a whole. However, since the end of the draft, the military's recruitment and retention policies might lead away from a broad representation of society and to a more "homogeneous" force. This force retains and promotes individuals who accept and feel comfortable in the military culture, but is isolated from the nation it is sworn to defend. It is well-documented that there are significant differences in civilian and military ways of life, i.e., long deployments away from home, the Uniform Code of Military Justice, and a "Service Above Self" attitude which can puzzle many Americans, especially in the modern day. To a person having no experience in the military or military affairs, these can often seem like bizarre rituals instead of a concerted effort at national security. Likewise, the military often expresses frustration with the civilian leaders and the public in general when it comes to explaining these situations because of the lack of commonality of similar experiences in the civilian population. These misunderstandings and often times mistrust of each other is only exacerbated when it comes to spending billions of dollars in taxpayers money, or worse yet, the commitment of the military into combat operations. With this idea that there is a "gap" between society and the military as a whole, can differences between the

populations and trends in demographic data be identified that can make this gap worse? If these differences are identified, what can they indicate about future public support of the military, whether in combat operations or the Federal Budget allocation process? This paper will attempt to answer these questions using demographic analysis. In answering these questions, the paper will first address why U.S. public support of the military is important, and although public support will be addressed in the broad context of the entire U.S. military, the focus will narrow by comparing the U.S. public and the active duty USAF populations. Next, measurements in certain demographic categories that represent the US and USAF will be taken to include gender, race/ethnic background, and race/ethnic background by gender. An analysis will be performed comparing and contrasting the two populations as well as identifying trends or other significant areas of interest. With a comprehensive demographic picture of the US public and the USAF, along with similarities and differences between them, conclusions will be drawn to see which areas could have an effect on public support of the military.

## **Limitations**

The limit and scope of this research will confine itself to the comparison of the active duty USAF (enlisted and officer) and the US population within the age range of 18 to 54 years old. The rationale behind measuring only the age group of 18 to 54-year olds in the US population is twofold. First, the vast majority of USAF personnel (over 99 percent)<sup>1</sup> are in this age group. Secondly, United States Bureau of the Census (USBC) statistical tables are organized into age groups, with an age group break occurring at the 54 year-old point. As a result, some small elements of the Air Force population will exceed the 54 year-old age group, but too small to make a statistical significant impact.

By concentrating in these age brackets, a meaningful analysis between the populations could be accomplished based on like characteristics. Finally, only the active duty force was examined. The comparisons do not include any other data from United States Air Force Reserve (USAFR) or Air National Guard (ANG). The size and scope of this research effort did not allow for a complete discussion of these important, yet distinct portions of the “total force” USAF structure. Therefore, the USAFR and ANG will not be included in this study.

The final limitation concerns demographics. Although an important tool for individuals attempting to further the study of society, its characteristics, and reasons for conflict or change, demographics cannot get inside the minds of people and show how they are thinking or feeling, or how they will react to certain situations. We can only try to predict conflict and change based on previous experiences with similar trends or contrasts in size and variety of demographics. In the terms of this research effort, demographics are important because they can show similarities or differences between society and the military. As stated earlier, this can potentially impact public support of the military, and in this case, the USAF.

### **Notes**

<sup>1</sup> “Active Duty Demographic Information.” Air Force Personnel Center, On-line. Available from <http://www.afpc.randolph.af.mil>

## Chapter 2

### Public Support of the Military

*Public sentiment is everything. With public sentiment nothing can fail; without it nothing can succeed.*

—Abraham Lincoln

#### Foundations of Public Support

As mentioned earlier, public support is an underlying element in the relationship between American society and its military. But is it important? And if so, why? The answers to these questions lie in the history of our country and its political foundations. The founding fathers of the United States sought to free themselves and the thirteen colonies from the grip of the King of England and its monarchical control, a system of government in which they had no say or representation. Their increasing frustration with policies they viewed as unfair—“taxation without representation”—led them to declare themselves independent and form a democratic government, one “instituted among Men, deriving their just powers from the consent of the governed.”<sup>1</sup> The entire idea of a democratic government rests on the principle of elected officials representing different segments of society so as to provide for the common good. As a logical extension, the Congress of the United States created a military “to provide for the common defense.”<sup>2</sup> The generally accepted idea of a military at this time was one of a militia force and not a large, standing, professional army, one that considered “every able-bodied ‘free man

above the age of fifteen, and that under sixty' ... a potential soldier.”<sup>3</sup> This was the idea of the English militia back in the late 17<sup>th</sup> and early 18<sup>th</sup> century, and an idea the colonists (and ultimate framers of the Constitution) brought with them from England. The visions of British redcoats exacting the King’s will on the colonies were critical in shaping their opinions of large standing armies.<sup>4</sup> The framers of the Constitution sought a military under the control of civilians, who, in turn, were responsible to the people. The avenues of this control were the Congress and the Office of the President that allowed public access to decision making in the use of the military and its force structure. More importantly, it ensured the military could not become a rogue element, by subjecting it to the control of popular elected civilian leaders. The framers of the Constitution declared “The United States in Congress ... shall have power to declare War”<sup>5</sup> and “provide for organizing, arming, and disciplining, the Militia”<sup>6</sup> because they saw the need for the nation’s populace to take an active role prior to the commitment of the military. Without the consent and support of the people, via the avenue of congressional declaration of war, military action would not take place. This stems from the colonists’ experience with the monarchy of England, which used military force and other foreign affairs endeavors at the discretion of a sole authority – the king or queen. Our founding fathers sought to remove this “one man” concept of engaging the country into operations that could endanger lives and expend considerable resources of the country without first receiving a popular mandate from the people. Although the President has used military force unilaterally in many subsequent actions, the essence of a popular mandate being required prior to the declaration of war still applies. With this idea of a representative form of government relying on the consent of people on military matters, it is clear what the



implications of public support can bring to military operations. The US public, via the Congress they elect, decide how the military is organized, trained, equipped, and funded. Without public support or endorsement, through these publicly elected officials, the military cannot gain access to the resources it needs to sustain itself, chiefly personnel and money allocated to it by Congress. The discussion of why public support of the military is important would not be complete without exploring issues that effect this public support.

### **Contextual Issues Effecting US Public Support of the Military**

There are several issues that can effect the underlying support of the military by the public. Casualties of US servicemen and non-combatants, as well as highly public scandals effecting military personnel can all have a corrosive impact on the public's view of the military. There can also be positive impacts, such as a speedy, one-sided conflict with relative light casualties such as the Persian Gulf War.

Another issue capable of effecting public support of the military is one of demographic differences, which is the focus of this paper. A representative form of government, like the United States, draws its power from the people. It has elected officials who represent the society as a whole from all demographic categories – male, female, White, African American, Hispanic, and so forth. As shown earlier, the US form of military, as intended by the founding fathers, was one of a militia force that drew upon the American populace for the composition of its force. A military that draws from all walks of American society can inherently pull the same unique qualities of different ethnic backgrounds and therefore relate itself on basic terms with the American public. Although the military has different standards associated with it for the sake of combat

effectiveness (team verse individuality) it still should mirror the society it has sworn to defend. An important example of this was seen during World War II. After the attack of Pearl Harbor, President Roosevelt, with the consent of Congress, declared war on Japan, with the Axis Powers declaring war on the US shortly afterwards. The US, reeling after its losses in Hawaii, rallied the American public behind the war effort, bringing the great industrial base to bear and producing a monumental war-making machine. This included everything needed to sustain the war effort from tanks to aircraft, and most important, personnel to fight the war using conscripted service. The draft resulted in personnel entering military service from all walks of life and all demographic categories – White, American Indian, African-American, etc. This brought the war home to every neighborhood and street in America, and someone could say they knew of a relative or friend serving in the Armed Forces. This “personalization” of the war at every level of society and all walks of life made it an “American” effort supported by all elements and thus embodied the spirit of the militiamen created by the framers of the Constitution. In this way, the U.S. public supported the war effort and the sacrifices needed in a wartime economy to sustain the war effort and final victory. This war-making effort would not have been possible if the American public had failed to see the legitimacy of the effort or supported its cause in our democratic form of government.

Another impact of demographic differences is one of peacetime military strength and its effect of the Federal Budget process. Because a sizeable standing military incurs a significant portion of the Federal Budget, the smaller the force, the smaller the cost, and therefore room for other items in the Federal Budget – the classic “guns verses butter” issue. As previously stated, the USAF depends on publicly elected officials of Congress

for its budgetary allocation. In turn, the Congress must justify its disbursement of taxpayer dollars to various items in the Federal Budget to the American public. As the demographic landscape of the US changes, these changes will be reflected in the representatives that are elected to Congress. If the USAF stays demographically static, that is, it does not reflect the changes happening within society, the gap between the two will widen. The USAF could then find itself with personnel who depart the service and understand its role, but who are in a narrow demographic band within the US and not representative of the society as whole. As a result, fewer and fewer Americans and those who represent them in Congress will have experience in military affairs. With a military and an Air Force that increasingly relies on high technology weapons which often are very expensive, the American public and Congress often receive “sticker shock” when the pricetags are revealed. In addition, because these high costs, any cost overruns or alleged mismanagement of money runs well into the millions of dollars amplifying the effect it has on the public. If the USAF is out of step demographically with its society, it can also be out of step with a Congress that represents its society’s demographic base. This could result in difficulty in justifying the Air Force’s budget requests because of this lack of a broad, representative base.

In summary, public support is a key underpinning in the relationship between the US public and its military. This support and opinion of the military can be effected by several issues – budgetary concerns, casualties, and, the focus of this paper, that of demographics. Demographics can effect public opinion because the military draws its personnel, its mandate for action, and budget support from society as a whole. A military

that does not adequately represent its society runs the risk of alienating itself from the population as a whole and, in turn, support for its actions.

### Notes

<sup>1</sup> Declaration of Independence

<sup>2</sup> Preamble of the Constitution of the United States

<sup>3</sup> Dedere, John Morgan, *War in America to 1775: Before Yankee Doodle*. (New York and London: New York University Press, 1990), 115.

<sup>4</sup> *Ibid.*, 141.

<sup>5</sup> Constitution of the United States, Section 8, Clause 11

<sup>6</sup> *Ibid.*, Clause 16.

## **Chapter 3**

### **Methodology**

*It was not as difficult as it seemed. Actually, all I had to do was to work nonstop.*

—Robert Woodruff

#### **Overview**

The discussion of U.S. public support of the military and issues effecting that support offer some insight into the relationship as a whole between Americans and their military. The contextual element of demographics offers the opportunity to measure population descriptive statistics (gender, race/ethnic origin, etc.) in the US public and USAF. Before any precise analysis on the numbers can be done, though, it is important to categorize the data and to put into some working form. This is done to “standardize” the data across both populations and to make accurate comparisons possible.

#### **Data Collection**

##### **Data Sources**

Data sources for this effort came from two basic sources. For the US population, the data was retrieved from the Statistical Abstract of the United States, from years 1981 to 1998. These came in hard copy form, requests in writing from the USBC, and finally on-line information retrieved from the Internet. The sources for the USAF demographic

information came from the Air Force Personnel Center (AFPC) through requests in writing and information available on-line on the Internet.

## **Categories**

Demographics from both sources were available in a variety of formats and categories. The basic premise of data collection was to provide a “waterfall effect,” one that provided increasingly detailed data. There are basic characteristics of both populations that can be measured, to include gender and race/ethnic background. Race, is defined as a “ local geographic or global human population distinguished as a more or less distinct group by genetically transmitted physical characteristics” while ethnic is described as “relating to sizable groups of people sharing a common and distinctive racial, national, religious, linguistic, or cultural heritage.”<sup>1</sup> In addition, further analysis will be accomplished by further breaking out the data in terms of ethnic/race *and* gender. Besides the obvious gender characteristics of male and female, there are five basic race and ethnic backgrounds which both the USBC and the USAF track. These are Hispanic (which is considered an ethnic background), White, Black (non-Hispanic), Alaskan or American Indian, and Asian and Pacific Islander. For Hispanic backgrounds, this includes elements of the population that are of Mexican, Puerto Rican, Cuban, or Other/Spanish origin. According to the US Abstracts, their data is accumulated through “ a monthly nationwide survey of scientifically selected sample representing the non-institutional civilian populations.”<sup>2</sup> Populations for institutional populations, such as the military, are collected, tracked, and forwarded to the USCB for their inclusion in total US population numbers. Further explanations and details on these characteristics are available through the USBC in their yearly Abstract publications. Data received from the

AFPC are accumulated in a central USAF database based on a variety of sources, mostly from personnel records. They follow the same measuring characteristics as the USBC in race and ethnic background.

### **Data Stratification**

As previously mentioned, to provide an accurate comparison between the US public and USAF, some data stratification was necessary. USBC information was presented in tables listing race/ethnic background by age. These tables had break points in age groups (for example 5 years of age and under, 55 and over, etc.) to further stratify the data. Since breaking out the USAF data precisely by age (the data was presented only in terms of 50 and older) a logical breakpoint needed to exist. A breakpoint in the USBC existed at 55 and over. This would incorporate elements of the US population from 18 to 54; however stratification of the USAF data was not as accurate since it would encompass all year groups, even those over 54. It is realized that a very small element of the Air Force population is 55 and over, but based on previous references, this number is less than .3 percent, and therefore, insignificant in the bottom-line analysis.

In collecting the data from the USBC, figures for 1993 in terms of race/ethnic background were not available from any of the previous sources mentioned. This does not preclude trending because 17 years of data is available (1980-1992, 1994-1997). Demographic figures were available for the USAF in 1993, but were removed from the analysis to provide a similar database to the US population.

A series of tables were built to capture the US and USAF Demographic data, and they can be found in Appendix A.

## **Caveats to Data Collection**

Besides the previously mentioned caveats concerning age range in the USAF, there are several others that need to be addressed. The first is when persons are queried on their race/ethnic background, individuals will respond to the category they believe they represent. That is, although they think they belong in a certain race/ethnic background, they might truly represent another. Although this presents some risk in an accurate count, for the purposes of this effort, their answers and resultant numbers in the categories are accepted as correct and valid. Related to this is the category in USAF elements as Unknown/Other. Some individual data was not available on personnel in the Air Force, or it was in a category not applicable to the USAF measurement categories. This data fluctuates from year to year, but is generally small, in the range of .06 to 1.3 percent. Although this can sway other certain small categories, such as Alaskan/American Indian, for the larger categories, it is a relative minor figure. The next caveat is one of who is counted. The US population reflects the residential populace of the United States, including Armed Forces living overseas. This does not reflect illegal immigrants and others who reside in a non-permanent status in any of the 50 states or Territories. The Air Force data reflects total force numbers of those on active duty at the end of the fiscal year. In addition, the USBC periodically revises its annual data, and publishes its final data for the year based on a date of 1 July. The Air Force accumulates data based on Fiscal Years, listing the numbers based on numbers reflected on the 30<sup>th</sup> of September. Although comparisons of the two populations will take place on dates that are the same day, this should not invalidate meaningful analysis because the dates are only 90 days apart.



On the data tables for the US Population figures, occasionally total numbers between gender, race/ethnic background, and by gender and race/ethnic background do not exactly add up. The reason for this discrepancy is in rounding. When categories are subdivided into further areas (for example, Whites to White males and females) the rounding errors lost in the major category (in this case whites) are made up for in lower categories. For example, if whites were listed overall as “1,000” this could reflect a number of 499.4 for males, and 500.4 for females. The combined categories would read 1000, but individual categories would read 499 and 500, due to rounding. These numbers are very small and insignificant to the total population numbers.

#### **Notes**

<sup>1</sup> The American Heritage Dictionary, Boston MA 02116, Houghton Mifflin Company, 3<sup>rd</sup> Edition, 1996. 1488, 630

<sup>2</sup> US Bureau of the Census. *Statistical Abstract of the United States: 1996*. 116<sup>th</sup> ed. Washington DC: US Government Printing Office, 1996

## Chapter 4

# Data Presentation and Analysis

*Information is power*

—Arthur Sylvester

### Introduction

This chapter presents data graphically and in table format from various sources. This will give the reader visual cues in trending and order of magnitude in the areas to be compared. The categories to be compared will be in overall population sizes, gender, race/ethnic background, and race/ethnic background by gender. Initially, an overall comparison between the sizes of the two populations was accomplished so as to give a “big picture” view of how the populations relate to one another in size.

For more detailed analysis in gender and race/ethnic background, two separate sets of analysis was accomplished to interpret the data. First, the overall population percentages in the selected characteristic (Hispanic, White, etc) from the years 1980 to 1997 were plotted to form a trend line. Based on the graphs, three questions were asked:

1. Is the population’s representation growing?
2. Is the population’s representation declining?
3. Is the population’s representation static?

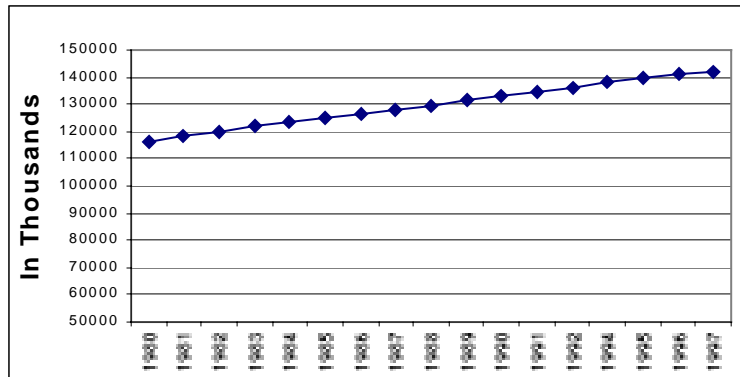
Next, a trend line, created by subtracting the percentages in the USAF from the US population was created to show the yearly differences from 1980 to 1997. Based on these trend lines, four questions were posed:

1. Is there a difference (gap) between the two population percentages?
2. If there is a gap, is it growing, declining, or static?
3. Given there is a gap, in the year 1997 what was the percentage difference between the USAF and US populations?
4. Is this 1997 gap significant (plus or minus 10 percent of the US population)?

The significance level of plus or minus 10 percent was based upon a window where fluctuations in populations could be accounted for. For example, if the US representation of a measured category were 20 percent, this would be multiplied by 10 percent (.10), resulting 2 percent (.2 times .1 equals .02). The result would be a percent window that would have an upper boundary of 22 percent (20 percent plus 2 percent) and a lower boundary 18 percent (20 percent minus 2 percent). Although some elements of the population might grow significantly more in relation to another, the expectation is that the growth in one (the US population) would eventually be reflected in the other (USAF). Finally, the categories will be presented in increasing detail, so as to provide the “waterfall” effect described earlier. At the end, a chart will be built to summarize the findings of these comparisons.

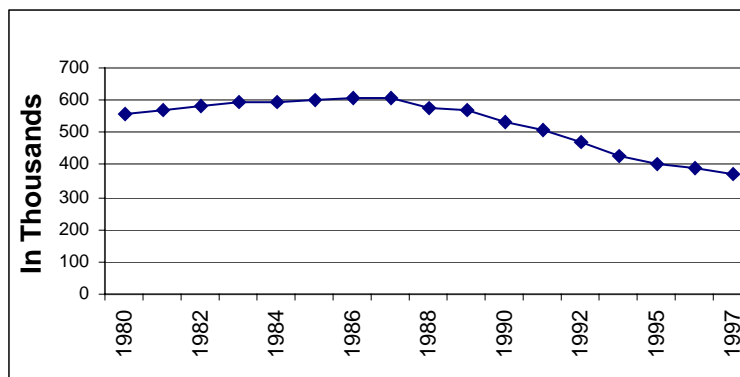
## **Population Comparisons**

To give a relative idea of how big the populations are between each other, the total numbers of the populations were first compared. This is to give some idea of differences in size and context to each other before other areas are explored. Figure 1 shows the relative growth of the US population, ages 18 to 54, from 1980 to 1997.



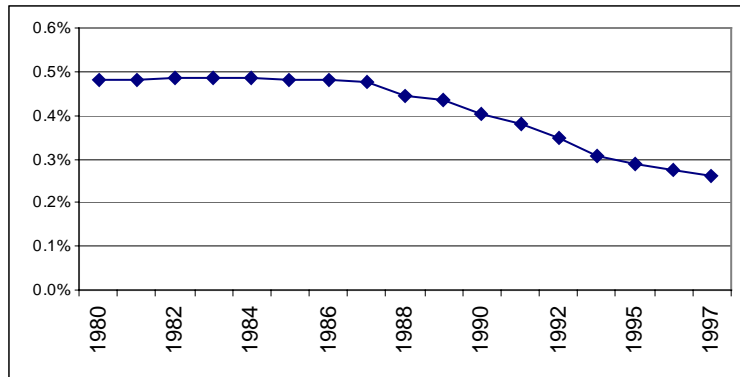
**Figure 1 US population Ages 18-54**

Generally, the US population increased by one percent a year. On the other hand, Figure 2 shows the end of fiscal year strength for the USAF. As can be seen, the USAF (and the US military as a whole) dramatically downsized since its peak strength of almost 604,000 in 1986 to just over 373,000 at the end of 1997, a decrease of 38.2 percent.



**Figure 2 USAF Active Duty Force Strength**

Figure 3 relates the USAF size as a percentage of the entire US population. The Air Force's end strength has gone from a high of almost .5 percent in 1983 to .26 percent in 1997.

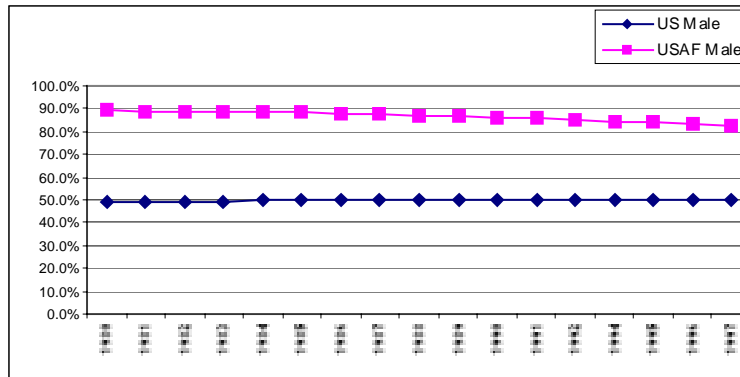


**Figure 3 USAF Strength, as a Percentage of US Population**

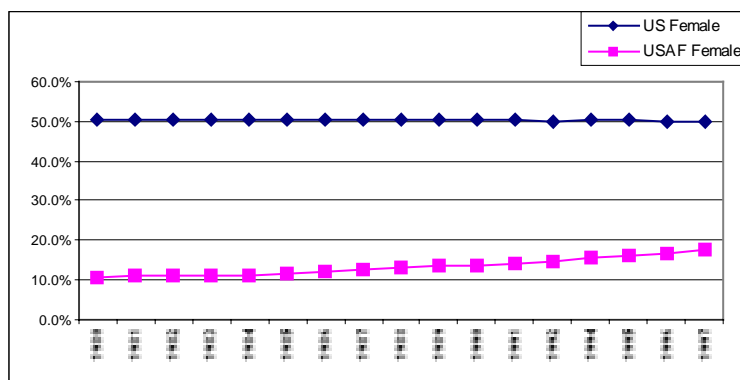
No further analysis will be done on the overall population sizes. This will be used as a point of departure in discussing demographic differences between the two. With such a dramatic reduction in the USAF as it relates to the US population, it will be interesting to determine the effects of demographic shifts in the two populations.

### **Gender Comparison**

The next category of measurement will be in gender characteristics to determine if a significant difference exists between the two populations. Historically, the US military and the USAF have been a male-dominated occupation, based on legal restrictions of women in combat. Therefore, it should not come as a surprise to find men over-represented in the USAF population (Figure 4) and women under-represented (Figure 5).



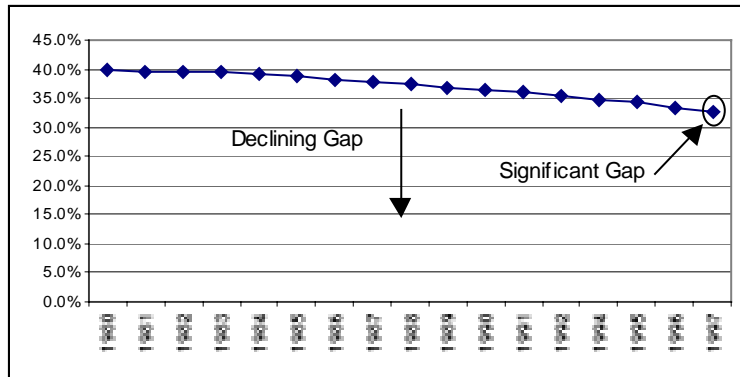
**Figure 4 USAF and US Male Population**



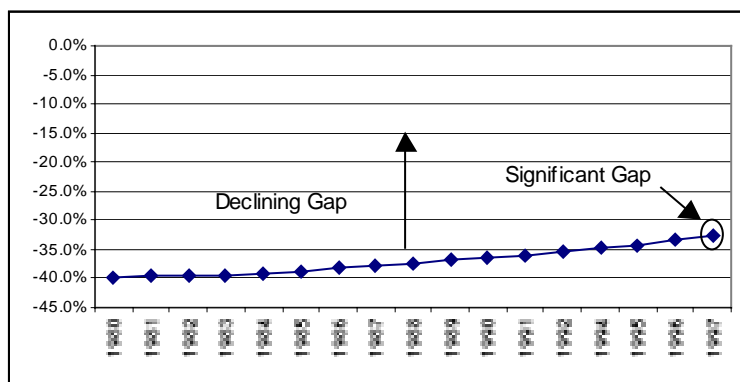
**Figure 5 USAF and US Female Population**

Based on these two graphs, the trend line for US males is static, and the USAF men is seen as declining. In addition, the US female population trend line is static, but for US USAF females it is growing.

Next, analyzing the trend line differences for US to USAF males and US to USAF females (Figures 6 and 7, respectively), it is shown that there is a difference between the two populations. For the male portion, there is a declining gap based on the fact that the US male population is static, while the USAF is declining. Since the USAF male representation of 82.5 percent is greater than plus or minus 10 percent of the 49.9 percent US population (a window of 44.91 to 54.89 percent) in the US population, it is significant. Similar results are taken from the US and USAF female trend lines.



**Figure 6 Difference Trend Between USAF and US Male Populations**



**Figure 7 Difference Trend Between USAF and US Female Populations**

There is a gap between USAF and US females, however it is declining since the US population is static, and the USAF female population is growing. In addition, since the USAF female representation is 17.5 percent, it is outside plus or minus 10 percent of the 50.1 percent US female representation (a window of 45.09 to 55.11 percent) and therefore significant.

In summary, the gender gaps between the two are declining, based on their relative standing. The USAF male population is declining, and therefore becoming more in line with the US population. The female USAF population is growing and therefore growing closer the representation of woman in the US public. A caveat to this is the

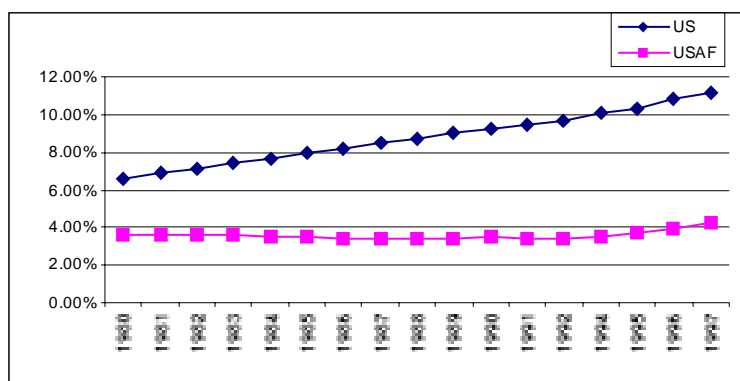
populations are still significantly different than each other despite the decline of males in the USAF and the increase of females.

## Race/Ethnic Comparison

In keeping with the progressively detailed analysis, this section will present race/ethnic background comparisons in the categories of Hispanic, White, Black, Alaskan/American Indian, and Asian/Pacific Island.

### Hispanic Population

For the purposes of measurement, the Hispanic population by the USBC is considered an ethnic background, consisting of individuals who consider themselves of Mexican, Puerto Rican, Cuban, or Other/Spanish origin. By percentage, the Hispanic population is the largest growing segment of the US population, increasing from 6.61 percent in 1980 to 11.14 percent in 1997. The USAF population has gone from 3.59 percent to 4.26 percent in the same time span. The US population trend is growing, while the USAF line is relatively static (Figure 8).

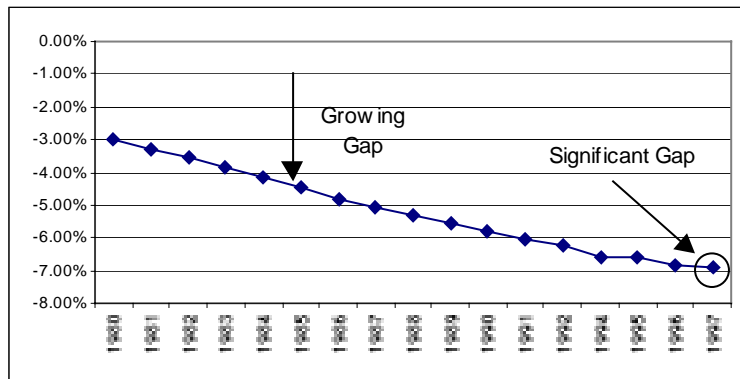


**Figure 8 USAF and US Hispanic Population**

Next, the difference trend line between the two populations shows there is a gap between the USAF and US Hispanic populations, and it is growing (Figure 9), with the US



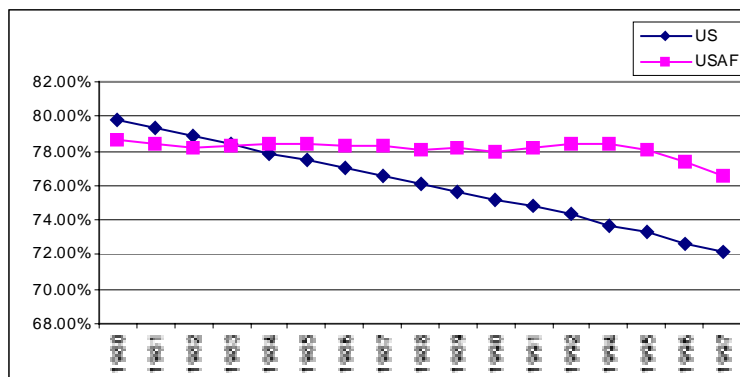
population holding a 3 percent margin over the Air Force in 1980, growing to 6.88 percent in 1997. Since the USAF representation of Hispanics in 1997 (4.26 percent) lies outside plus or minus 10 percent of the 11.14 percent US Hispanic representation (a window of 10.03 to 12.25 percent), it is deemed significant.



**Figure 9 Difference Trend between USAF and US Hispanic Populations**

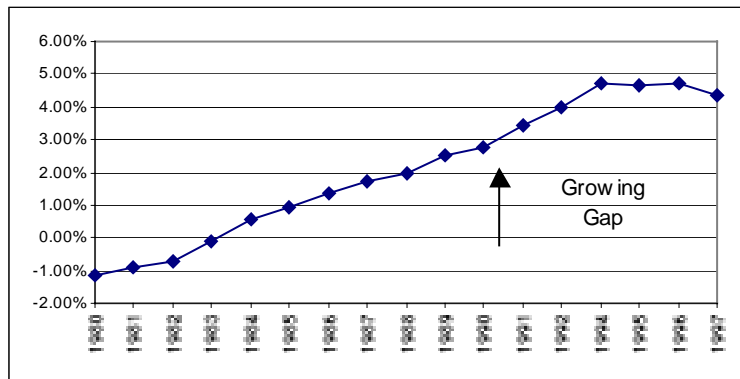
### White Population

In terms of total percentage, Whites comprise the largest portion of both populations. The White segment of the US population went from 79.81 percent in 1980 to 72.91 percent in 1997, reflecting a declining trend. The Air Force segment remained relatively static but dipped in the last few years, going from 78.67 percent to 76.55 percent. It can be deemed as declining as well (Figure 10).



**Figure 10 USAF and US White Population**

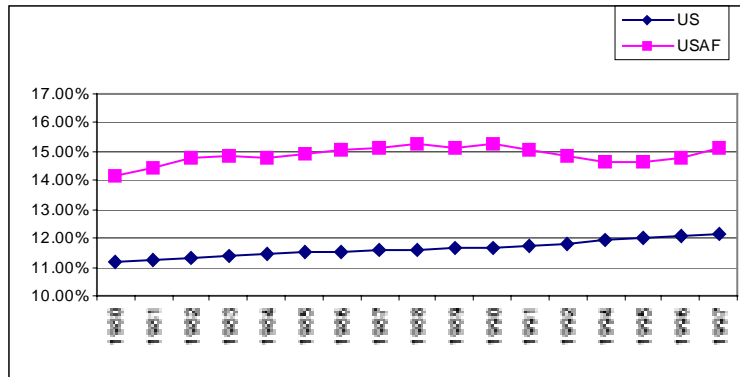
Based on Figure 11 (below), there is a difference in the populations as of 1997, and this gap, although slowing recently is growing. However, since the USAF White population of 76.55 percent lies within the 10 percent window of the US White population of 72.19 percent (a range of 64.97 to 79.41 percent), it is not significant.



**Figure 11 Difference Trend between USAF and US White Populations**

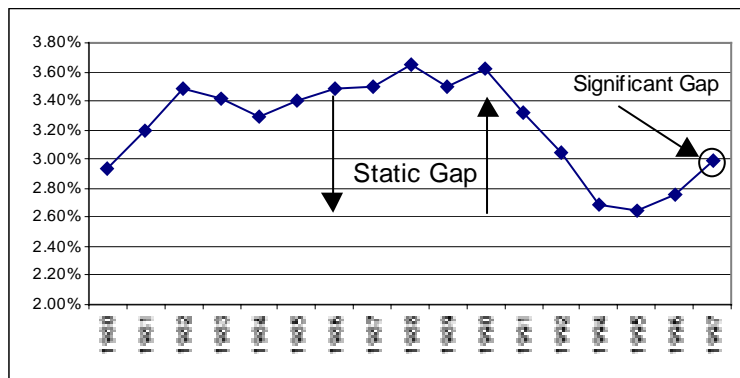
### **Black Population**

The Black population in the United States has experienced a slow, but consistent growth, increasing from 11.19 percent to 12.14 percent. The percentage of Blacks in the Air Force also experienced slow growth, with a minor decrease seen during the force reduction years of the early 1990's. Its increase was also one percent from 1980 to 1997, maintaining a 3.0 percent gap it had in 1980. Both population trends are shown in Figure 12.



**Figure 12 USAF and US Black Population**

Based on this information, both populations are growing. The difference trend line (Figures 13) reflects cyclic characteristics; the 3.0 percent gap in 1980 fluctuated between 2.64 percent and 3.64 percent, until returning to 3.0 percent in 1997. Therefore, it is a static gap, and since it lies outside the plus or minus 10 percent window of the 12.14 percent US Black population (a range of 10.93 percent to 13.35 percent), it is significant..

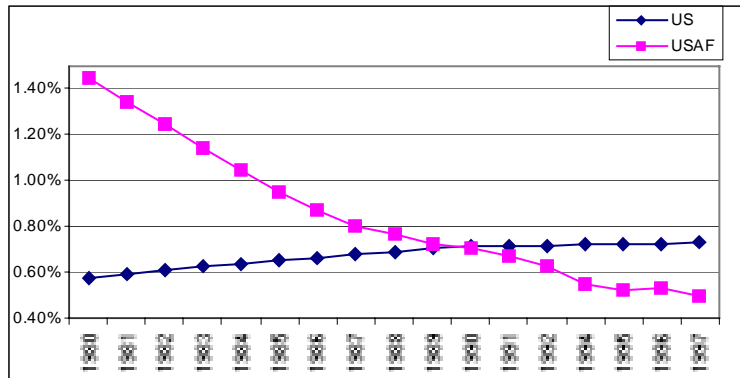


**Figure 13 Difference Trend between USAF and US Black Populations**

### **Alaskan/Native American Indian Population**

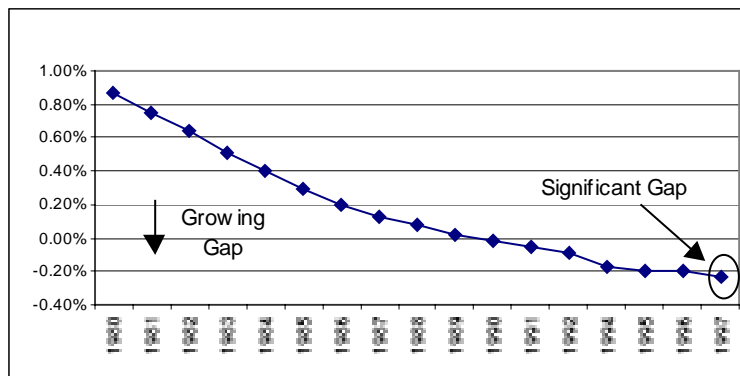
Alaskan/Native American Indian representation has historically been a relative small portion of both populations. The US portion claiming this heritage has seen very limited growth, from .58 percent in 1980 to only .73 percent in 1997. The Air Force population decreased, going from 1.45 percent to .5 percent in the same time frame. The

trend line for the US population can be deemed growing, while the Air Force trend line can be seen as decreasing (Figure 14).



**Figure 14 USAF and US Alaskan/Native American Indian Population**

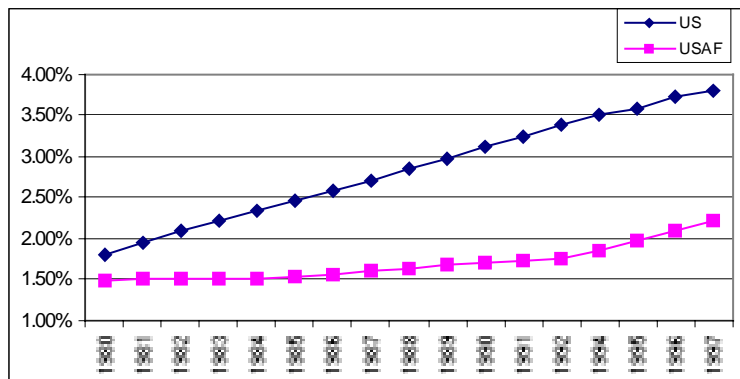
The difference between the two populations dropped from a .87 percent margin in favor of the Air Force, to a .23 deficit in 1997. Analysis of the difference trend (Figure 15) shows there is a gap and it is growing. In addition, this .23 percent gap in 1997 is outside the 10 percent window of the US population (.66 to .80 percent), so it is significant.



**Figure 15 Difference Trend between USAF and US Alaskan/Native American Indian Populations**

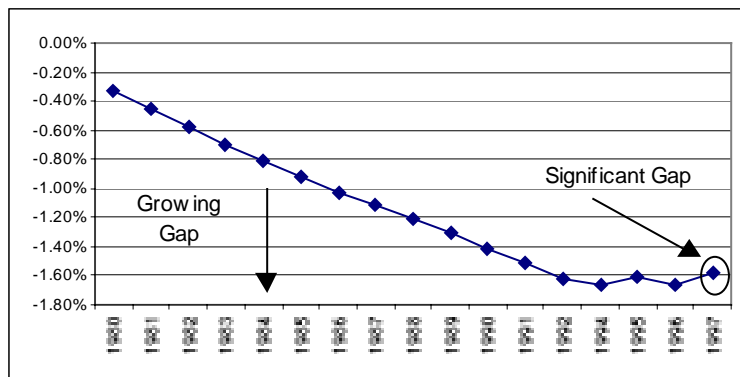
## Asian/Pacific Island Population

Although the Asian/Pacific Island portions in both populations remain small, it is a steadily growing part. The Asian/Pacific Island portion of the US population more than doubled since 1980, going from 1.81 percent to 3.8 percent, while the Air Force experienced somewhat slower growth, going from 1.48 percent to 2.21 percent. Both of these populations are experiencing growth trends (Figure 16).



**Figure 16 USAF and US Asian/Pacific Island Population**

The difference trend line in Figure 17 shows the gap is widening between the two populations, reaching a difference of 1.59 percent in favor of the American public in 1997. Since the USAF population of 2.21 percent lies outside the 10 percent window of the 3.80 percent U.S. population (a range of 3.42 to 4.18 percent), it is significant.



**Figure 17 Difference Trend Between USAF and US Asian/Pacific Island Populations**

The following chart shows the results of the gender and race/ethnic analysis.

Category	Population	Population Trend	Is there a Gap? (Yes/No)	Is it Growing, Declining, or Static?	Is the Gap Significant? (Yes/No)
Gender	USAF Males	Declining			
	US Males	Static			
	Difference (USAF – US)		Yes	Declining	Yes
	USAF Females	Growing			
	US Females	Static			
	Difference (USAF – US)		Yes	Declining	Yes
Hispanics	USAF	Static			
	US	Growing			
	Difference (USAF- US)		Yes	Growing	Yes
Whites	USAF	Declining			
	US	Declining			
	Difference (USAF- US)		Yes	Growing	No
Blacks	USAF	Growing			
	US	Growing			
	Difference (USAF- US)		Yes	Static	Yes
Alaskan/ Native American Indian	USAF	Declining			
	US	Growing			
	Difference (USAF- US)		Yes	Growing	Yes
Asian/Pacific Island	USAF	Growing			
	US	Growing			
	Difference (USAF- US)		Yes	Growing	Yes

**Table 1 Summary of Race/Ethnic Background Differences**

## **Race/Ethnic by Gender Comparison**

The following section will now further subdivide the categories of race/ethnic background by gender. This is to give an ever-increasing measure of the population to determine if there are significant trends within these categories. To summarize the results, no overall population trend lines are displayed, only the differences between the two and if this difference is significant. Therefore, only the second set of questions will be asked. To reiterate, those four questions are:

Is there a difference (gap) between the two population percentages?

If there is a gap, is it growing, declining, or static?

Given there is a gap, in the year 1997 what was the percentage difference between the USAF and US populations?

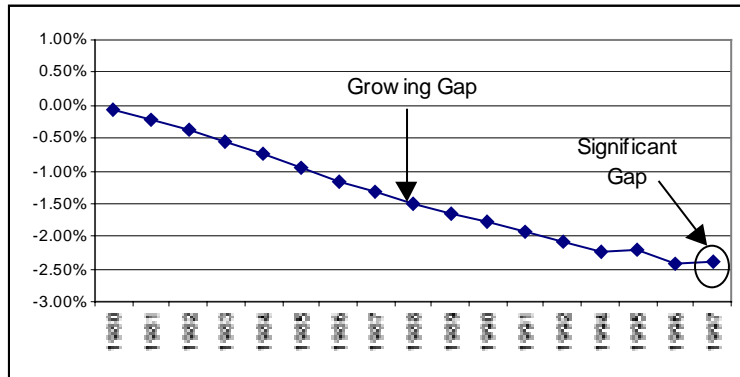
Is this 1997 gap significant (plus or minus 10 percent of the US population)?

A chart at the end of the chapter will display the results of the findings.

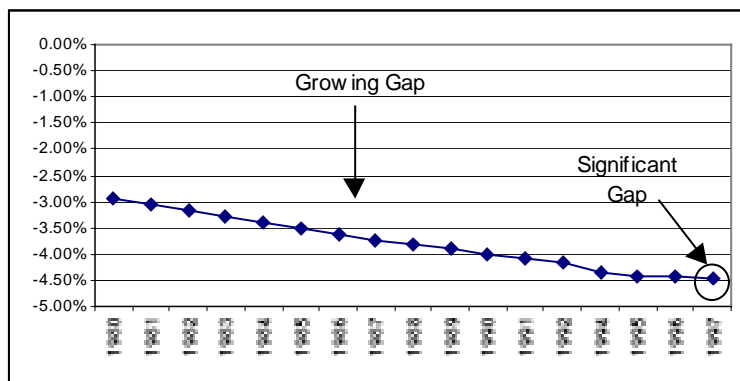
### **Hispanic Males and Females**

As shown in the previous section, Hispanics overall are the fastest growing segment of the US population. By breaking out between males and females, it is found that both are growing at relatively the same pace, with males going from 3.31 percent of the population to 5.87, and females growing from 3.24 percent to 5.27 percent. The Air Force recorded some growth in both categories, with Hispanic males going from 3.24 percent in 1980 to 3.47 percent in 1997, and females increasing from .35 percent to .79 percent.

Figures 18 and 19 display the trend lines for the differences between the two populations. They show the widening gaps between both male and females, although these gaps are slowing in the late 1990's.



**Figure 18 Difference Trend between USAF and US Hispanic Males**



**Figure 19 Difference Trend between USAF and US Hispanic Females**

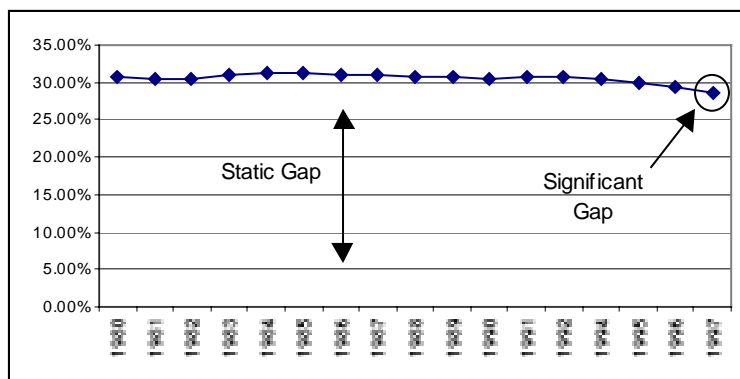
Since the USAF male Hispanic population of 3.47 percent lies outside the 10 percent window of the 5.87 percent US population (a range of 5.29 to 6.46 percent), it is significant. Likewise, the USAF Hispanic female representation of .79 percent lies outside the 10 percent window of the 5.27 percent US population (a range of 4.74 to 5.8 percent), so it also is significant. Of specific note, Hispanic males outnumber females in



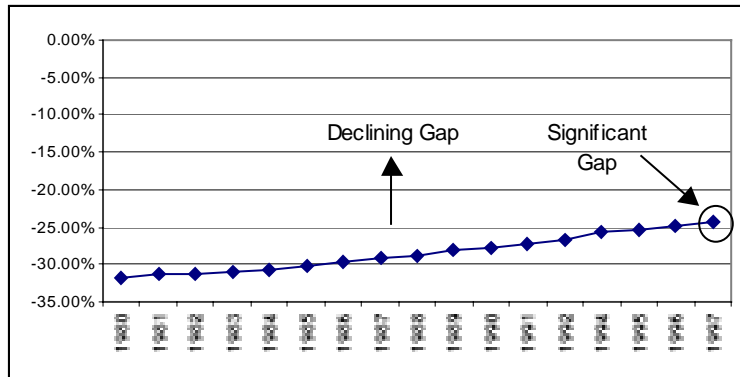
the Air Force 2 to 1 but there is still a significant gap in their representation overall in the Air Force in relation to the US.

### White Males and Females

The White male and female populations of the US and USAF show interesting demographic shifts. For the US population, the White male and female populations have decreased by 3.5 and 4.0 percent respectively, with males now holding a relatively small margin over females (36.13 verse 36.06). However, the USAF White male population steadily declined from 70.41 percent to 64.73 percent, and White females went from 8.25 percent to 11.82 percent in 1997, a difference of 3.67 percent. This makes White females the fastest growing segment of the USAF population. To further illustrate, the gap between USAF and US females narrowed by 7.61 percent, the largest swing between populations examined in this research. Figures 20 and 21 show the difference trend lines for the male and female populations, respectively.



**Figure 20 Difference Trend between USAF and US White Males**



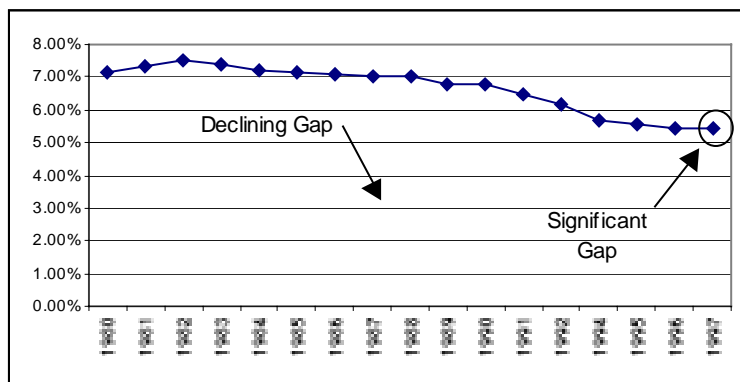
**Figure 21 Difference Trend between USAF and US White Females**

To summarize, there is a gap between White USAF and US males, and between USAF females and US females. However, the gap between White males is static, while the gap between females is declining. Finally, both gaps are seen as significant because US White males represent 36.13 percent of American society, while USAF White males represent 64.73 percent, almost a twofold difference and well outside the 10 percent window. In addition, White US females are over 36 percent of the population, while White USAF females are only 11.82 percent of the Air Force, over a threefold difference, and again, well outside the 10 percent window.

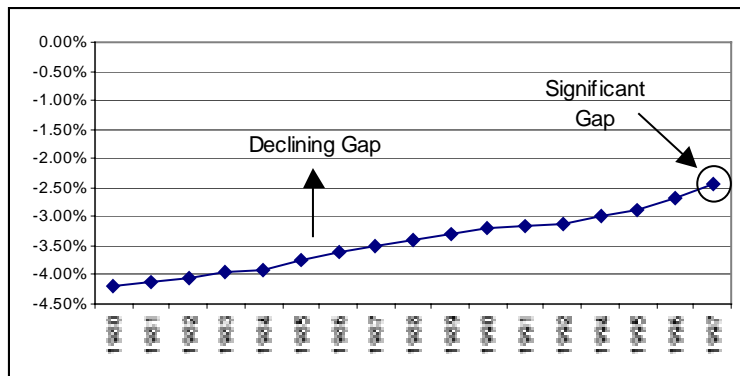
### **Black Males and Females**

Another interesting demographic shift has occurred in the Black population. Since 1980, the US Black population grew by about 1 percent overall, with the growth almost evenly split between men and women (.52 percent for men and .43 percent for women). On the other hand, the overall USAF Black population has increased by a similar number, yet Black males have *decreased* by over one percent (12.32 percent to 11.14 percent) and Black woman have *increased* by over two percent (1.81 percent in 1980 to 4.0 percent in 1997). Although this still leaves Black men more represented in

the Air Force than in the US population, the gap is declining from 7.12 percent in 1980 to 5.42 percent in 1997 (Figure 22). In addition, the Black female population, under represented in the USAF population relative to the US population by 4.18 percent in 1980, narrowed the gap to 2.42 percent in 1997 (Figure 23). Therefore, although there is a gap it is declining. Since the USAF Black male population of 11.14 percent lies outside plus or minus 10 percent of the 5.72 percent US population (a range of 5.15 to 6.29 percent), it is significant. In addition, the USAF Black female population of 3.99 percent also lies outside the 10 percent window (a range of 6.36 to 7.06 percent) of the 6.42 percent US Black female population, so it, too, is significant.



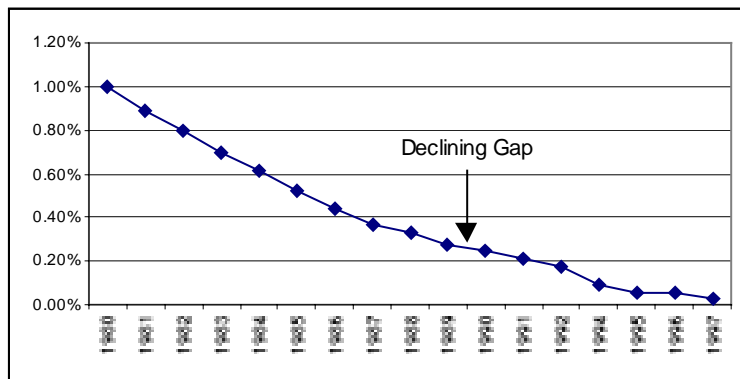
**Figure 22 Difference Trend between USAF and US Black Males**



**Figure 23 Difference Trend between USAF and US Black Females**

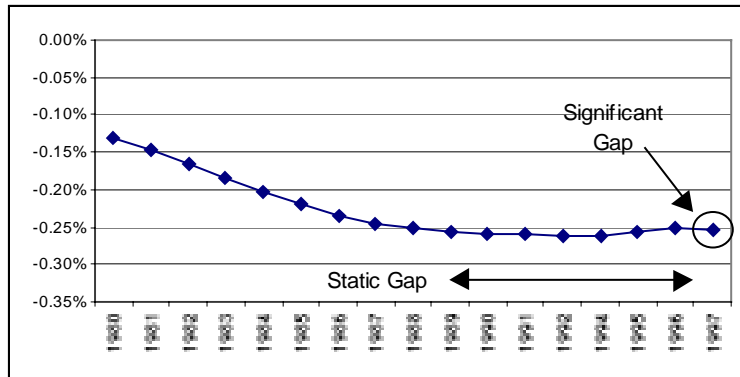
### Alaskan/Native American Indian Male and Females

The USAF and US Alaskan/Native American Indian populations experienced slow growth in the 1980 to 1997 span. The US male and female populations increased nearly identically, with males going from .29 percent to .36 percent and females also starting at .29 percent and growing to .37 percent. The USAF male portion of the Alaskan/Native American population is declining, going from 1.28 percent to .38 percent in 1997. The female population is static, going from .16 percent to .11 percent over the same time period, and the last 13 years fluctuating between .10 and .12 percent. So, as the male portion of the USAF declined it is now virtually identical to the US population (within .02 percent). Therefore, the gap is declining but it is not a significant gap because it falls within the 10 percent window of the .36 percent US population (Figure 24).



**Figure 24 Difference Trend between USAF and US Alaskan/Native American Indian Males**

For females, there is a .25 percent gap between USAF and US females, although this gap has stayed virtually constant since 1988, and therefore deemed static. Since Alaskan/American Indian females comprise .37 percent of the US population and USAF Alaskan/Native American Indian females comprise .11 percent of the Air Force, it is over a threefold difference and well outside the 10 percent window (Figure 25).

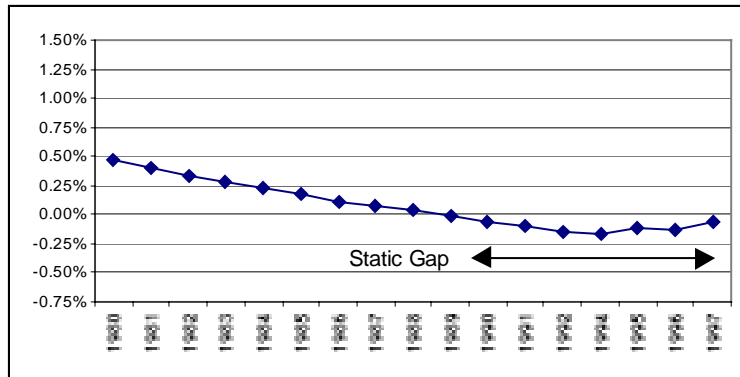


**Figure 25 Difference Trend between USAF and US Alaskan/Native American Indian Females**

### **Asian/Pacific Island Males and Females**

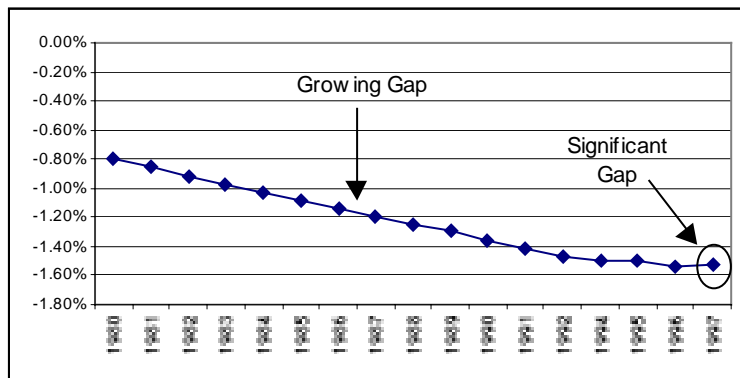
Another fast growing element of the US population is the Asian/Pacific Island segment. From 1980 to 1997, the US male and female populations more than doubled, with males going from .85 percent to 1.82 percent, and females rising from .95 percent to 1.95 percent. The USAF male Asian/Pacific Island population also experienced growth, going from 1.33 percent to 1.82, but not at the same rate as the US population. Females also grew, going from .16 to .46 percent.

Analysis of the difference in male population reveals the Air Force holding a margin of .46 percent in 1980, but now slightly under represented as compared to the US population in 1997. There is a very small gap between the two because of the rapid growth in the US portion and not the USAF. However, the gap has not seen much variation in the last few years, going from a maximum of .16 percent in favor of the US to a .01 percent in favor of the Air Force and is static. As a result, the gap is not significant since the .07 gap is within the 10 percent window (Figure 26).



**Figure 26 Difference Trend between USAF and US Asians/Pacific Islander Males**

However, growth in US Asian/Pacific Island females far outweighed the growth of USAF Asian/Pacific Island females creating a widening gap. Since the US Asian/Pacific/Island female population of 1.98 percent is over four times the .46 percent representation of USAF Asian/Pacific Island females, it falls well outside the 10 percent window and is deemed significant (Figure 27).



**Figure 27 Difference Trend between USAF and US Asians/Pacific Islander Females**

## Summary

The following table was built to summarize the differences between males and females in the two populations.

Category	Population	Is there a Gap?	Is it Growing, Declining, or Static?	Is it Significant?
Hispanics	Males	Yes	Growing	Yes
	Females	Yes	Growing	Yes
Whites	Males	Yes	Static	Yes
	Females	Yes	Declining	Yes
Blacks	Males	Yes	Declining	Yes
	Females	Yes	Declining	Yes
Alaskan/Native	Males	Yes	Declining	No
American Indian	Females	Yes	Static	Yes
Asian/Pacific	Males	Yes	Static	No
Island	Females	Yes	Growing	Yes

**Table 2 Summary of Race/Ethnic Background by Gender Differences**

To further summarize the findings, Table 3 is presented to consolidate the findings of gender, race/ethnic background, and race/ethnic background by gender. This concludes the data analysis portion and conclusions, based on this data, will be presented in Chapter 5.

Category	Population	Population Trend	Is There a Gap? (Yes/No)	Is it Growing, Declining, Or Static?	Is it Significant? (Yes/No)	
Gender	USAF Males	Declining Static				
	US Males					
	Difference (USAF-US)		Yes	Declining	Yes	
	USAF Females	Growing Static				
US Females						
Difference (USAF-US)		Yes	Declining	Yes		
Hispanics	USAF	Static Growing				
	US					
	Overall Difference (USAF-US)		Yes	Growing	Yes	
	Male Difference (USAF-US)		Yes	Growing	Yes	
	Female Difference (USAF-US)		Yes	Growing	Yes	
Whites	USAF	Declining Declining				
	US					
	Overall Difference (USAF-US)		Yes	Growing	No	
	Male Difference (USAF-US)		Yes	Static	Yes	
Female Difference (USAF-US)		Yes	Declining	Yes		
Blacks	USAF	Growing Growing				
	US					
	Overall Difference (USAF-US)		Yes	Static	Yes	
	Male Difference (USAF-US)		Yes	Declining	Yes	
Female Difference (USAF-US)		Yes	Declining	Yes		
Alaskan/ Native American Indian	USAF	Declining Growing				
	US					
	Overall Difference (USAF-US)		Yes	Growing	Yes	
	Male Difference (USAF-US)		Yes	Declining	No	
Female Difference (USAF-US)		Yes	Static	Yes		
Asian/ Pacific Island	USAF	Growing Growing				
	US					
	Overall Difference (USAF-US)		Yes	Growing	Yes	
	Male Difference (USAF-US)		Yes	Static	No	
Female Difference (USAF-US)		Yes	Growing	Yes		

**Table 3 Summary of Demographic Analysis**



## **Chapter 5**

### **Conclusions**

*Our opinions do not really blossom into fruition until we have expressed them to someone else*

—Mark Twain

### **Introduction**

Up to this point, the discussion revolved around foundations for public support, its meaning to the Armed Forces, and the effect of contextual elements, specifically demographics, on public support. In addition, a detailed analysis of gender and race/ethnic backgrounds of the USAF and US populations showed gaps exist between some of the populations and that some of these gaps are increasing. It is now time to discuss some of the effects these widening gaps can have for the Air Force of the future.

### **The Gap between Military and Society**

#### **Demographic Shifts**

As mentioned earlier, an overall gap exists between the US military and American society, a gap that takes into account many differences in lifestyles, such as military justice and long absences from home. This overall gap is not easily defined or measured, but certain contextual elements, such as demographics, help quantify portions of the gap. The initial research question asked what differences between the USAF and US

populations and trends in each population's demographic data could make this overall gap worse. In an effort to answer this, Chapter 4 showed there are some very distinct differences between the USAF and US demographics and in the population trends.

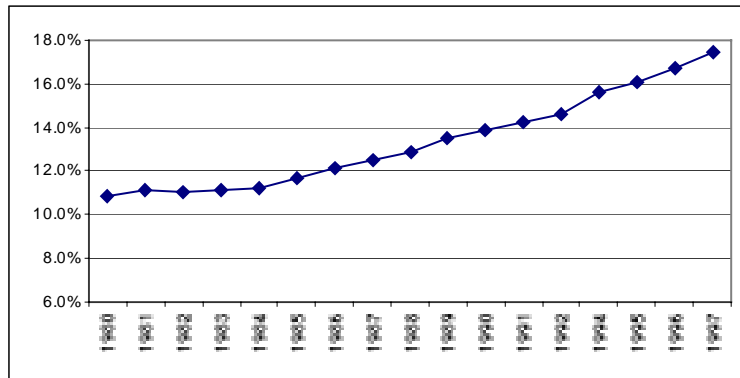
Below is a quick summary of those differences and their significance:

1. A significant gender gap exists, it is declining, and both gaps (male/female) are significant.
2. For racial/ethnic background, four out of five categories had gaps that were growing, and four out of five were significant in their size.
3. For race/ethnic background by gender, it was discovered three out of the ten gaps were growing, and eight out of the ten gaps were significant.

Since demographics are only a *portion* of the total gap between society and the military, each of the categories examined (gender, race/ethnic background, etc.) are, in turn, a part of the demographic gap. Each category has an ultimate impact on the total gap, and therefore must be examined as to their effect. In other words, demographic categories are shifting in such a way that they are either widening the overall gap (making it worse), while other categories are closing the gap (making it better). To identify shifts in the USAF and US populations, only the categories of gender and race/ethnic backgrounds were examined. Analysis and shifts of race/ethnic *by* gender will be alluded to in the discussion of population shifts; however, the intent was to discern the *overall* effect on the demographic shifts, not shifts within the categories themselves

The largest swing in populations between the USAF and US from 1980 to 1997 was in the overall category of females. The US population male/female split stayed very close to a 50/50 split from 1980 to 1997. However, the USAF male/female split went from 88 percent male/12 percent female, to 81 percent male/19 percent female. This

means although USAF is still predominately male, there is a very discernible upward trend in female representation in the USAF (Figure 22).



**Figure 28 Female Representation in the USAF**

As a result, the ratio of men to women in the USAF is consistently moving closer to that of the US public (closing the gap), although it still has considerable ground to cover. A big reason for the shift must be related to the opening of more combat roles to women in the US military and USAF. An adjunct to this is as the recruitment of personnel in the military gets more intense due to a strong economy and the opportunities outside the military, it has become an absolute necessity to overcome gender bias in order to recruit, train, and retain quality personnel. Bluntly put, the military no longer can afford the luxury of refusing personnel based on their gender. In the early 1980's, the female representation did not significantly change. However, in the late 80's and through the 90's, as roles for females in the military increased, the female representation grew by a minimum of .3 percent (during the military downsizing) to a very robust increase of .8 percent from 1995 to 1996. In fact, the female representation increased despite the dramatic military draw down of the 1990's. In addition, in every race/ethnic category, female representation within that category increased. Although this demographic shift is still in its infancy, it will prove to be very significant when personnel who entered the

USAF during this time become senior enough to effect policy on recruitment and retention in the USAF. Having seen the USAF go from a male dominated occupation to one of growing equal male/female representation in the military will likely shape the future female leadership in the USAF concerning the demographic make-up of the Air Force of tomorrow.

Over 95 percent of the USAF and US populations are comprised of Whites, Blacks, and Hispanics, and therefore the main focus of this section. The most significant population difference between the two is in the category of Hispanics, a population that grew significantly in the US, but not in the USAF. The gap between Hispanic representation in the USAF and US (almost 7 percent in 1997) is the widest of the five race/ethnic background categories measured, and still growing. Other services have a higher representation of Hispanics than that of the USAF (the United States Marine Corps has a 22 percent representation), so why not the Air Force? One answer could be found in education. The USAF has a 99 percent target for recruiting personnel with high school degrees because of the high technology jobs in Air Force. However, only 55 percent of the Hispanic teenagers in the US have a high school diploma<sup>1</sup> and therefore a large percentage are excluded from consideration for entry into the Air Force. If these low graduation rates continue, it will adversely impact the USAF's ability to recruit, train, and promote Hispanics. This gap, for at least the near term, will continue to widen and exacerbate the overall gap.

Whites and Blacks are the other major elements of the USAF and US populations. Although there is a gap between USAF and US White populations, it was not deemed significant because the USAF population was within 10 percent of the US. In addition, it

was seen as growing because of the overall trend in the last decade. However, it is very difficult to predict its direction with any certainty due to a number of elements. First, the difference between the USAF and US actually declined in the last year of measurement. Secondly, after a rapid increase in the difference between the two in the late 80's and early 90's, it has slowed considerably. The difference may have reached a culminating point, and is now on a downward trend. Or, it may be just part of cycle that has reached its peak, and will start a downward trend for a number of years, only to increase again. One definitive element is that White females will increasingly make-up a larger share of the overall population in the USAF. White females showed the largest increase of the female categories, closely followed by Black females. This also supports the overall increase of females in the USAF. Again, it is difficult to predict the future of representation of Whites in the USAF as it relates to the US since the current demographic data reflects a pause in the shift. The only absolute is to say the White population will continue to be the major element of the USAF and US populations for years to come.

The USAF and US Black population difference is cyclic, fluctuating around a 3.0 percent gap. It has consistently been the second largest segment of the USAF and the US population, although with the growth of Hispanics in the US population, it might be overtaken in the next 5 years if the growth in the Hispanic segment continues at its present pace. Being the second largest part and continually more represented in the Air Force than the US population as a whole, Blacks seem to have found a niche within the military. A variety of reasons could account for this continued representation. One of the most prevalent reasons could be economic; many studies have addressed the issue of

an “economic draft” of Blacks into the military because of a lack of opportunity elsewhere in the American economy. Additionally, several other endeavors have addressed other reasons for a higher representation of blacks in the Armed Forces.<sup>2,3,4,5</sup> Although the complete discussion of this reason is outside the scope of this paper, the continued representation of Blacks in the USAF points to this as a strong reason. With the ability to receive training, education, and experience that are sometimes out of reach in the civilian sector, it is a strong incentive to join. In addition, racial equality in the military, although not perfect, is generally viewed as better than American society as a whole. Finally, the most interesting shift can be seen in the reduction of Black males and the increase of Black females inside the USAF. With Black males dropping by one percent since 1980 and Black females increasing by two percent, the overall difference between the USAF and the US has stayed the same. However, this demographic shift is consistent with the overall increase of female representation inside the Air Force. Ultimately, it appears Black representation in the Air Force will continue to exceed the US representation, yet the make up of that representation will be increasingly female.

In summary, the most significant demographic shift between the two populations is with increasing representation of females in the USAF. This appears to be a steady, strong trend that will shape the Air Force of the future. The gap between USAF and US Hispanic populations is one of the largest, and as the US population continues to grow, this gap will continue to widen. The demographics of the White population is in a state of flux, with the only strong trend appearing to be in the increase of females. The Black population, having kept a steady gap of 3.0 percent, mirrored the overall USAF trend of increase in females. Although subtle shifts within the USAF have taken place in the last

18 years, most notably with an increase of woman, these demographic changes will take years to manifest themselves into senior level representation and therefore, the face of the USAF.

## **Future Considerations**

### **Budgetary Impacts**

A well known phrase says “An Army travels on its stomach.” Paraphrasing this saying into the modern times, one might say that the “Air Force lives by the budget.” That is to say that the Air Force continues to evolve and shape in part due to fiscal restraints. Because the Air Force does not have an infinite pot of money to draw upon to face current and future threats, it constantly faces budgetary dilemmas to prioritize what is procured (in both people and weapon systems) to face these threats. The reasons for these budgetary restrictions are clear – the Federal Budget is a limited resource pool, based on the demands of numerous considerations in the non-defense related realm, such as social programs, interest on the national debt, and so forth. In addition, the Air Force faces competing demands of other Services within the Department of Defense budget. As the organization that allocates the Federal Budget, Congress has the ultimate decision on funds given to the Air Force. Service Secretaries and General Officers are often called before Congress to justify expenses, clarifying and amplifying on items the Service requests each year. Chapter 4 proved that there are significant demographic gaps between the Air Force and society, a society represented in Congress through publicly elected officials. As the US population in demographic terms gets “fatter,” that is, it represents a wider range of gender and ethnic/racial backgrounds, the Air Force stays

relatively “thin” in its demographic representation. Therefore, where the leadership elements of the USAF and US meet on the budgetary battlefield, there is a demographic inequality. From the US public standpoint, these demographic differences manifest themselves into differing priorities than military spending. In addition, as noted before, the vast majority of the USAF and its visible leadership is White male. This “Face of the Air Force” that meets an increasingly diverse demographic base in Congress could meet resistance because of this lack of common demographic ground.

In summary, as one population changes its demographic make-up (US society) and the other stays relatively static (USAF), this gap could create problems in the USAF reaching requested funding levels. These problems could arise from a US society that has increasingly smaller representation in the military and the USAF, and who have competing priorities for Federal Budget allocations.

### **Personnel Recruitment**

Many people, especially the young, join organizations out of some basic desires. They may want to be part of the organization’s cultural values, what it stands for, or have some common goals to achieve. If an individual looks into an organization, and finds characteristics he or she likes, they generally have a desire to join. Translating this to a young American expressing interest in joining the USAF, if he or she looks inside the USAF and does not find an atmosphere they feel comfortable with, they are not likely to sign up. One of the areas that could concern them is the lack of representation in their own gender or race/ethnic background. They could possibly feel isolated amongst a population that is predominately White or male. Conversely, if a young, White male looks into the Air Force and sees predominately White males, he could feel an acceptance



level higher than the previous example, and therefore, more apt to join. In this way, the rate of change and growth in the military could be stagnated due to this unfamiliarity or uneasiness in joining an organization and only compounded by the fact that the USAF and the military is different in so many other ways from civilian life. Education is also another potential barrier to employment in the USAF. As previously stated, Hispanic youths often find it difficult to enter the USAF because of the education requirements. Although this barrier is not a result of ethnic bias, it is cause for concern since Hispanics are a rapidly growing portion of the US population, but not in the USAF and the gap is ever widening. There is no near term solution for this gap; education levels and opportunities they provide are long term problems not easily overcome. However, identification of this widening gap is a starting point for future study.

### **Public Support of the Military**

Early portions of this paper examined the importance of US public support of the military. With such a dynamic, interwoven relationship as the military and the US public, quantifying a shift for support of the military is an inexact science at best. Possibly the closest in terms of measurable data are public opinion polls. However, this can be subject to intense debate as to accuracy, based on the questions asked or “recency effects,” where polls are taken immediately after a military operation. What cannot be disputed is the effect of public support of the military. It is the cornerstone of the entire public-military relationship, because without it, effects are fairly clear cut. From the overwhelming public support of World War II to the evaporation of support for the Vietnam War, US history is full of examples displaying where it has been a pivotal factor. Demographics are only portion of this public support; if a US society is not

demographically represented in Armed Forces, this can strain this relationship and in turn, the support the public gives to its military.

### **Recommendations for Future Research**

There are several areas for future research. One specific area would be to compare and contrast the demographic shifts within the officer and enlisted force as compared to the US public. Due to the size and scope of this effort, comprehensive analysis could not be accomplished. However, a thumbnail breakdown of the numbers shows discernible trends in all categories. Also, breakdowns in terms of Air Force Specialty Codes (AFSC's) should provide an excellent measurement of not only where the demographic shifts are occurring in the officer/enlisted population, but how it is effecting the direct combat or combat support occupations. Finally, any comparisons between the USAF and other US military services could be accomplished to show how representative each force is as it relates the US public.

### **Summary**

In conclusion, the discussion of public support of the military is often a very complex one, covering several issues, such as budgets, casualties, and the focus of this paper, demographics. Gaps between the military and society all ready exist in lifestyles, and this gap can be widened by a military that under represents categories in society as a whole. These can have specific impacts when it comes to budgets, and most importantly, personnel recruitment. The USAF and military as a whole will have to be attuned to these growing differences in the future to continue to be an effective guardian of America's freedom.

## Notes

<sup>1</sup> USA Today, 20 January 1999.

<sup>2</sup> Moskos, Charles C. *Military Service in the United States*. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1982. 132

<sup>3</sup> Binkin, Martin *America's Volunteer Military: Progress and Prospects*. Washington D.C.: The Brookings Institution, 1984. 26

<sup>4</sup> Berryman, Sue E. *Who Serves? The Persistent Myth of the Underclass Army*. Boulder, CO.: Westview Press, Inc., 1988. 65

<sup>5</sup> Binkin, Martin *Who Will Fight the Next War? The Changing Face of the American Military*. Washington D.C.: The Brookings Institution, 1993. 74-85

## Appendix A

### Demographic Data

This appendix lists the raw demographic data for the United States and United States Air Force.

	MALE	FEMALE	TOTAL	HISPANIC	WHITE	BLACK	INDIAN	ASIAN	TOTAL
1980	57309	58772	116081	7671	92639	12994	672	2105	116081
1981	58390	59731	118121	8134	93677	13301	701	2308	118121
1982	59397	60637	120034	8578	94622	13597	730	2507	120034
1983	60312	61443	121755	9026	95402	13877	761	2689	121755
1984	61144	62166	123310	9470	96042	14139	786	2873	123310
1985	61999	62850	124849	9906	96694	14369	812	3068	124849
1986	62723	63544	126267	10367	97195	14594	840	3271	126267
1987	63563	64296	127859	10831	97866	14819	868	3475	127859
1988	64477	65137	129614	11331	98661	15038	896	3688	129614
1989	65436	66003	131439	11821	99480	15290	927	3921	131439
1990	66230	66814	133044	12324	100082	15531	952	4155	133044
1991	66878	67396	134274	12734	100444	15762	964	4362	134266
1992	67632	68072	135704	13139	100970	16026	975	4594	135704
1994	68771	69375	138146	13999	101788	16496	1001	4867	138151
1995	69365	69988	139353	14425	102196	16723	1010	4996	139350
1996	70362	70645	141007	15281	102418	17003	1024	5286	141012
1997	70972	71249	142221	15845	102667	17262	1037	5404	142215

**Table 3 US Demographics, by Race/Ethnic Background**

	MALE	FEMALE	TOTAL	HISPANIC	WHITE	BLACK	INDIAN	ASIAN	UNKNOWN	TOTAL
1980	493868	59926	553794	19856	435641	78270	8011	8215	3798	553791
1981	503181	62963	566144	20474	443814	81870	7578	8522	3879	566137
1982	514403	63959	578362	20903	451929	85668	7194	8719	3947	578360
1983	522186	65374	587560	21011	459872	87060	6699	8861	4050	587553
1984	526044	66601	592645	20847	464917	87473	6193	8991	4217	592638
1985	527448	69553	597001	20694	467874	89051	5668	9213	4494	596994
1986	530611	73100	603711	20551	472821	90846	5236	9424	4829	603707
1987	527254	75328	602582	20607	471475	90956	4849	9652	5037	602576
1988	498101	73881	571982	19589	446681	87198	4404	9350	4753	571975
1989	489608	76587	566195	19457	443025	85693	4083	9496	4776	566530
1990	456928	73599	530527	18492	413874	81200	3729	9045	4525	530865
1991	433815	71886	505701	17458	395875	76193	3372	8776	4372	506046
1992	397450	68299	465749	16034	365337	69246	2922	8202	4318	466059
1994	356247	65777	422024	15010	330851	61752	2316	7853	4240	422022
1995	332552	63555	396107	14802	308997	57994	2084	7816	4405	396098
1996	320534	64187	384721	15272	297692	56962	2042	8031	4713	384712
1997	307910	65169	373079	15881	285595	56448	1862	8259	5033	373078

**Table 4 USAF Demographics, By Race/Ethnic Background**

	HISPANIC		WHITE		BLACK		INDIAN		ASIAN		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
1980	3844	3827	46091	46548	6040	6954	331	341	1003	1102	116081
1981	4098	4036	46648	47029	6193	7108	345	356	1106	1202	118121
1982	4342	4236	47152	47470	6338	7259	359	371	1206	1301	120034
1983	4589	4437	47575	47827	6477	7400	374	387	1297	1392	121755
1984	4835	4635	47923	48119	6608	7531	387	399	1391	1482	123310
1985	5078	4828	48313	48381	6720	7649	400	412	1488	1580	124849
1986	5333	5034	48552	48643	6835	7759	414	426	1589	1682	126267
1987	5590	5241	48908	48958	6946	7873	427	441	1692	1783	127859
1988	5868	5463	49321	49340	7050	7988	440	456	1798	1890	129614
1989	6142	5679	49753	49727	7172	8118	456	471	1913	2008	131439
1990	6423	5901	50021	50061	7292	8239	468	484	2026	2129	133044
1991	6631	6103	50250	50196	7399	8366	475	489	2125	2239	134273
1992	6839	6301	50543	50425	7535	8493	481	494	2232	2363	135706
1994	7240	6756	50945	50842	7758	8738	493	507	2337	2529	138145
1995	7449	6976	51158	51038	7866	8856	500	511	2393	2603	139350
1996	8056	7227	51260	51158	8004	8997	506	518	2532	2747	141005
1997	8349	7493	51384	51282	8132	9128	512	523	2586	2818	142207

**Table 5 US Demographics, Race/Ethnic Background by Gender**

	HISPANIC		WHITE		BLACK		INDIAN		ASIAN		Other/Unknown		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
1980	17925	1931	389942	45699	68232	10038	7113	898	7352	863	3325	473	553791
1981	18447	2027	395966	47848	71073	10797	6707	871	7597	925	3410	469	566137
1982	18829	2074	403910	48019	74102	11566	6361	833	7779	940	3462	485	578360
1983	18933	2078	411277	48595	74653	12407	5913	786	7896	965	3555	495	587553
1984	18760	2087	415745	49172	74418	13055	5483	710	7994	997	3689	528	592638
1985	18551	2143	416970	50904	74879	14172	5012	656	8158	1055	3925	569	596994
1986	18360	2191	419671	53150	75561	15285	4615	621	8264	1160	4182	647	603707
1987	18335	2272	416975	54500	74983	15973	4246	603	8424	1228	4327	710	602576
1988	17342	2247	393423	53258	71322	15876	3832	572	8150	1200	4059	694	571975
1989	17089	2368	387838	55187	69301	16392	3512	571	8188	1308	4024	752	566530
1990	16143	2349	361209	52665	65197	16003	3176	553	7770	1275	3789	736	530865
1991	15156	2302	344420	51455	60649	15544	2841	531	7481	1295	3636	736	506046
1992	13806	2228	316343	48994	54666	14580	2443	479	6939	1263	3581	737	466059
1994	12709	2301	284043	46808	47704	14048	1876	440	6464	1389	3475	765	422022
1995	12437	2365	264289	44708	44289	13705	1648	436	6352	1464	3543	862	396098
1996	12639	2633	253342	44350	42773	14189	1597	445	6433	1598	3758	955	384712
1997	12937	2944	241502	44093	41573	14875	1433	429	6539	1720	3925	1108	373078

**Table 6 USAF Demographics, Race/Ethnic Background by Gender**

## ***Glossary***

AFPC	Air Force Personnel Center
ANG	Air National Guard
UCMJ	Uniformed Code of Military Justice
USAF	United States Air Force
USAFR	United States Air Force Reserve
USBC	United States Bureau of Census

## ***Bibliography***

- Active Duty Demographic Information.” Air Force Personnel Center, On-line. Available from <http://www.afpc.randolph.af.mil>
- Berryman, Sue E. *Who Serves? The Persistent Myth of the Underclass Army*. Boulder, CO.: Westview Press, Inc., 1988. 65
- Binkin, Martin *America’s Volunteer Military: Progress and Prospects*. Washington D.C.: The Brookings Institution, 1984. 26
- Binkin, Martin. *Who Will Fight the Next War? The Changing Face of the American Military*. Washington D.C.: The Brookings Institution, 1993. 74-85
- Constitution of the United States, Section 8, Clause 11
- Declaration of Independence
- Dedere, John Morgan, *War in America to 1775: Before Yankee Doodle*. (New York and London: New York University Press, 1990), 115.
- Moskos, Charles C. *Military Service in the United States*. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1982. 132
- Preamble of the Constitution of the United States
- The American Heritage Dictionary, Boston MA 02116, Houghton Mifflin Company, 3<sup>rd</sup> Edition, 1996. 1488, 630
- US Bureau of the Census. *Statistical Abstract of the United States: 1996*. 116<sup>th</sup> ed. Washington DC: US Government Printing Office, 1996
- USA Today, 20 January 1999

DISTRIBUTION A:

Approved for public release; distribution is unlimited.

Air Command and Staff College  
Maxwell AFB, Al 36112